

NAVAL WAR COLLEGE Newport, R.I.

FROM THE SEA...FROM THE CV:
Do Carriers Really Contribute to Peace Operations?

by -

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A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

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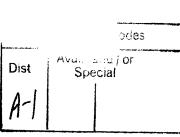
ABSTRACT

This study examines present carrier air power--the ship, its onboard facilities, and embarked airwing--to determine how well it meets the requirements of a joint task force commander (CJTF) conducting peace operations. Carrier (CV) air power capabilities are analyzed against the principles for operations other than war (OOTW) outlined in Joint Publication 3-0, Doctrine for Joint Operations: objective, unity of effort, legitimacy, perseverance, restraint, and security.

The CV delivers a wide range of capabilities to a CJTF in peace operations—rapid response, impressive C4I structures, timely intelligence collection and distribution, responsive airborne surveillance, and precision force protection—which have been the driving forces behind repeated CV deployments in peace operations.

Analysis yields shortcomings in particular mission areas requiring more effective capabilities--psychological operations (PSYOPS), night observation, photo-reconnaissance, degraded weather force protection, and minimum lethality weapons--for which solutions are offered.

Proposals suggest improved capabilities to conduct PSYOPS broadcasts, increase available assets for night observation, incorporate specialized handheld cameras and unmanned aerial vehicles for photo-reconnaissance, employ weapons utilizing the Global Positioning System, and exploit the emerging "disabling technologies" in non-lethal weapons.



INTRODUCTION

As an era of uncertain change replaces the uneasy stasis of the Cold War, the United States armed forces face the challenge of maintaining their warfighting edge while successfully conducting a myriad of operations other than war (OOTW). Recent years have yielded a proliferation of peace operations (PO), ranging from humanitarian assistance and intervention to enforcement of no-fly zone mandates.¹

Any discussion of PO should address the definitions one attaches to the many operations that are not war, especially given the plethora of terms which abound regarding "nation building", "peacebuilding", "humanitarian intervention" and "preventive diplomacy". For the purposes of this study, the broad array of PO has been arranged into three categories consistent with Joint Publication 3-0, Doctrine for Joint Operations; peacemaking, peacekeeping, and peace enforcement. Peacemaking (PM): The process of arranging an end to disputes and resolving issues that led to conflict, primarily through diplomacy, mediation, and negotiation.

<u>Peacekeeping (PK):</u> Operations involving the "traditional" truce-keeping missions in which forces are introduced at the request, or with the consent of, the major belligerents. PK is an outgrowth of Cold War tensions and its present form was not originally intended by the drafters of the U.N. Charter.

¹The United Nations (U.N.) has dispatched more forces since 1988 than it did in the previous 40 years combined.

Peace Enforcement (PE): This type of operation generally entails the armed intervention of forces to achieve policy objectives, with no presumption of belligerent consent. Unlike peacekeeping, PE may require a full scope of military capabilities and will assume that the use of force will be necessary.²

Can Carrier Air Power Contribute to Peace Operations?

This study will examine present carrier air power--the ship, its onboard facilities, and embarked airwing--to determine how well it meets the requirements of a joint task force commander (CJTF). For each category of PO, an analysis of CV air power strengths and limitations will be presented as well as recommended improvements.

Guiding Principles for Peace Operations

In approaching the planning and execution of PO, the CJTF will be best served when his forces conduct operations consistent with the nature of the political tasking. Joint Publication 3-0 outlines the following principles for OOTW which are useful in analyzing how well CV capabilities match CJTF requirements: objective, unity of effort, legitimacy, perseverance, restraint, and security.

²These categories are often grouped along a "spectrum of peace operations" to reflect the likelihood of violence. Two notes of caution apply. First, PO are characterized by dominating political factors which can restrict the traditional freedom of action found in wartime operations. Second, the consent of belligerent parties to the external influence of armed forces can vary greatly between types of PO and have serious implications in operational conduct. Thus, the categories of PO, which by nature elude neat packaging, have been somewhat artificially selected and by no means represent a continuum.

WHAT ABOUT THE AIRCRAFT CARRIER? IS THE "BIG STICK" SUITED?

The aircraft carrier and embarked air wing are acknowledged as a superior warfighting team. Given its extraordinary firepower capacity, one might surmise that carrier air power is poorly suited in OOTW applications. To be sure, there are activities such as security assistance and counterinsurgency in which the CV can play but a minor role. Yet a careful analysis of carrier air power in PO reveals a great number of valuable capabilities and potential force multipliers.

Analysis of Peacemaking Capabilities

PM supports diplomatic actions which seek to defuse situations and prevent the outbreak of violence. The employment of armed military units is often characterized by shows of force and deterrence through physical presence. In such operations, the CJTF may receive such tasks as noncombatant evacuation, humanitarian assistance, support to civil authorities, and rebuilding infrastructure.

Discussion

One of the greatest contributions that carrier airpower brings to PM is its mobility. Whereas three to four months lag time now exists between the authorization and deployment of ground units for U.N. operations, a CV can typically arrive in a matter of days. This inherent strength of the CV is

³ U.S. Congress, Senate, Committee on Foreign Relations, <u>Reform of United Nations Peacekeeping Operations: A Mandate for Change</u>, Staff Report (Washington: U.S. Govt. Print. Off., 1993),pp. 64-65.

appreciated by leaders outside the United States. Rear Admiral K.R. Menon of the Indian Navy, a veteran peacekeeper, notes that the aircraft carrier "is unmatched in response time and flexibility and by the speed of its deployment can often make a dramatic impact on the situation ashore before it worsens." Once on scene the CV can project national will and influence potentially hostile actors ashore through its physical (and possibly coercive) presence, without violating territory or overtly using force. Success in PM is measured by diplomatic or political change, which comes slowly, requiring a long-term commitment. Perseverance dictates extensive periods of presence, a requirement satisfied quite well by the CV.

Sustaining the operation demands that the CJTF ensure secure sea and air lines of communication (SLOC/ALOC). CV air power can monitor, observe, and if required, interdict air and seaborne traffic in the theater of interest utilizing shipboard and airborne sensors. Capabilities are not limited to the airborne assets; in the littoral, the carrier air traffic control center can provide air routing advisories to follow-on force air traffic and observe airspace over the areas of interest.

As a self-contained operating base the CV possesses a significant command and control structure which can be fused with the Unified Commander in Chief (CINC) and the National

⁴Pacific Armies Management Seminar, "United Nations Peacekeeping Operations," <u>Conference Papers</u> (New Dehli: 1993), p. 250.

Command Authority (NCA). In the wake of recent major upgrades, the CV C4I capabilities can be the CINC's insurance policy for ensuring unity of effort while facing the uncertainty of emerging crises.

The carrier intelligence center provides further advantages in its proven ability to collect, assimilate, and distribute timely, crucial intelligence information to the CJTF and supporting units, whether received from organic, theater, or national assets.

Carrier air power has an outstanding means of signals collection. With the phaseout of the EA-3B in the late 1980's, CV air power was limited in its capacity to conduct vital communications intercepts. Although the S-3B filled the gap with a limited capability, the recently fielded ES-3A "Raven" now offers substantially greater capabilities, most which are classified. Communications intelligence can be critical to the CJTF in assessing strategies, movements, and hostile faction intentions, especially in the early stages of potential crises.

Despite the vast array of capabilities in PM operations, CV capabilities are limited in the arena of public information and psychological operations (PSYOPS). For PO, these activities are a necessary adjunct to military and diplomatic operations. To achieve legitimacy, the CJTF must establish and sustain the willing acceptance of the people to accept the right of the peace force, or the supported government or

group, to make decisions and carry them out. The commander requires an information system to communicate the justification for forces in the area, the mandate they are implementing, and the progress which is being made, to the nations of interest.

U.N. personnel recommend an extensive public information campaign prior to the arrival of troops. Since the CV will often precede other forces into the region of interest, it would be an ideal platform for initial public information efforts. Such means as leaflet drops (assuming overflight is authorized) and radio/television broadcasts are commonly applied PSYOPS methods, but are mission areas in which CV air power has been rarely exploited or exercised.

Proposal

To bolster the capabilities of the CV in PM requires an improvement in its capabilities to conduct PSYOPS. A capability should be generated to allow the CV and air wing to broadcast radio and television programming into the area of interest. Conceptually, this capability would employ an airborne asset with great endurance, such as an S-3, to "satcat" the transmissions received directly from the CV, directly from a satellite, or relayed from a satellite through

⁵Cedric Thornberry of the U.N. pointed out that public information operations were one of the cheapest yet most neglected aspects of PO. He noted that in the former Yugoslavia, Serbian and Croatian media contributed to the creation of hostility toward the U.N. which "the U.N. has had limited means to rebuff."

the CV.6 CV's even have their own television studios which could potentially be utilized. While an investigation into the technical feasibility of such a capability is merited, there should be little doubt that this could significantly improve the CV efficacy in PM.

Analysis of Peacekeeping Capabilities

The use or threat of force is not the principal means of the inducing political change in PK operations, given the precondition of belligerent consent. Therefore, military activities must complement the cumulative efforts of diplomats, civilian government workers, private relief agencies, and multinational coalition troops.

Representative military tasks in PK operations include monitoring cease-fire lines, reconnaissance and surveillance of belligerent force movements, maintaining law and order, and maintaining physical separation of the belligerents. The often tenuous political situation compels the operational commander to remain keenly aware of the military and political environments to facilitate quick response by PK forces.

<u>Discussion</u>

During PK operations, the scope of the authorizing mandate is generally greater than in PM. The broader scope is accompanied by greater complexity in coordinating military

⁶The "satcat" concept utilizes an externally mounted pod on an aircraft to receive and retransmit electromagnetic signals. Prior to recent upgrades in CV communications capabilities, this practice was employed to enhance CV-to-satellite communications.

supporting actions and necessitates a robust, in-place command and control structure. CV facilities can provide the CJTF with the necessary coordination capabilities for controlling air operations. Until recently, CVs were constrained by available space in accommodating the sizeable Joint Force Air Component Commander (JFACC) staff and equipment required to plan and generate the daily air tasking order (ATO). Carriers will soon deploy with modular equipment units, stored in the hangar bay overhead, to facilitate a carrier-based JFACC. This new capability presents enormous flexibility to a CJTF, allowing him to rapidly establish a JFACC in the preliminary stages of a PK operation or to rapidly "move" a JFACC in the face of deteriorating political support from a host nation.

In order to measure progress toward military goals the CJTF requires timely, accurate intelligence to provide indications and warnings of belligerent military intent, and to understand certain tactical situations. CV aircraft can meet this requirement by providing photographic reconnaissance, which is particularly useful for monitoring difficult or undeveloped terrain inaccessible to the peacekeeping force. Airborne surveillance can confirm intelligence from ground sources and is timely, inexpensive and more easily disseminated in comparison to satellite

⁷Professor Ernest May states "Strategic intelligence has become tactical intelligence and vice versa....The odds are that in future conflicts front-line commanders will be demanding satellite imagery while White House staffers plead for intelligence information cables." Quoted in Kurt Reitinger, "Command and Control for Third Wave Warfare," Army Magazine, February 1995, p.10.

imagery, and therefore in high demand. A drawback to present CV capabilities is the limited number of photo-reconnaissance platforms. The mission has typically been a CJTF priority but only a handful of aircraft in the air wing, primarily the F-14 with a Tactical Air Reconnaissance Pod System (TARPS), can contribute.8

The CJTF often prefers air surveillance of the belligerent forces at night, as cover of darkness can allow for clandestine movements of troops and arms. CV aircraft equipped with Forward Looking Infrared (FLIR) and mission recorders are well-suited to this task. Unfortunately, the ongoing phaseout of the A-6E may leave a limited number of FLIR-outfitted assets in the remaining air wing aircraft, primarily due to present FLIR pod availability and capability. Given the near-future air wing composition, there may be insufficient CV assets to support the intensive photo/video monitoring required by the CJTF.

Practically all PO, including those with non-governmental and civilian agencies, require some form of force protection. In PK operations, this is especially true, since peacekeepers expect to use force only in self-defense and are usually only lightly armed. Hence, the CJTF requires protective forces which can flexibly operate in a wide variety of scenarios,

⁸TARPS requires a specialized pod and is in limited inventory on CVs.

The S-3 has the only remaining integral FLIR, F/A-18s rely on a limited inventory of FLIR pods, and F-14s have no FLIR video capability.

weather conditions, and threat environments to prevent potentially hostile factions from acquiring any unexpected advantage. CV aircraft typically employ in this mission, generally in the form of patrolling. Flyovers by high performance aircraft can offer psychological effects to belligerents as well as the PK force on the ground through their presence. 10 Should force protection be required for peacekeepers in extremis, carrier air power can precisely deliver close air support (CAS). The high degree of precision is attributable to the healthy array of precision guided munitions (PGM) onboard the CV, such as laser-guided bombs (LGB), Maverick missiles, and Walleye glide bombs. These capabilities, in conjunction with the proven effectiveness of night vision devices and FLIR, present outstanding options to the CJTF concerned with effectively protecting peacekeepers in day or night.

A recurring concern of any CJTF, however, is the minimal number of land-based or carrier aircraft which can conduct force protection precision CAS in degraded weather conditions. The commander then faces the choice of accepting a higher risk to either the forces on the ground or to the aircraft operating under the weather in potentially lethal airspace. This handicap affects virtually all US tactical aviation and

¹⁰John P. Abizaid, "Lessons for Peacekeepers", <u>Military Review</u>, March 1993,pp.15-17. Discussing tenuous situations on the ground during Operation PROVIDE COMFORT, Abizaid states that "there was no doubt that aircraft circling in the vicinity of our positions during tense moments had a sobering effect on potential adversaries."

is mentioned here to document a requirement as yet unsatisfied, due to a limitation imposed primarily by technology.

The CV can also meet select CJTF force support requirements. Fixed and rotary wing aircraft, such as the C-2, SH-3 or SH-60, can provide short-haul supply transport to forces ashore. Rotary wing aircraft may be especially suited to this mission in a logistically immature theater with inadequate airfields. CV onboard facilities and aircraft can provide essential services for the CJTF such as emergency medical care for casualties, air search and rescue, and meteorological observations and forecasting. The CV may be one of the few units on scene available to perform these services in the initial or final stages of a PK operation.

Proposal

The effectiveness of CV air power in PK has been shown to be limited in its night observation, photo-reconnaissance, and degraded weather precision CAS capability.

Increasing the number of assets with night observation capabilities can be accomplished primarily through acquiring a greater number of FLIR pods. Utilizing more pods would enhance CV air power capacity across the entire spectrum of conflict, and thus would not be an improved capability focused narrowly on PO.

The capacity of CV aircraft to conduct photoreconnaissance is limited by the present number of TARPS pods and might be overcome in several ways. In the near future, the F/A-18 Advanced Tactical Airborne Reconnaissance System (ATARS) will supplement F-14 TARPS and should improve the air wing capabilities. While the ATARS system promises to be exceptionally capable, it is intended for only one platform. A complementary option, applicable to most CV aircraft, may be the proven capability to use specialized handheld cameras which digitize the scenery for near-real time transmission to the CV (for further processing or possible retransmission to the CJTF, CINC or NCA). This concept could contribute to a significant increase in the flow of photographic intelligence. 12

An "unconventional" approach to achieving this improvement rests in the employment of unmanned aerial vehicles (UAV) from the CV. The Navy has decided to purchase a marinized version of the Hunter UAV for use on CV and amphibious assault ships which can be utilized for aerial reconnaissance, limited night observation, and show potential for target damage assessment following force protection fires. 13

¹¹ATARS will require removal of the F/A-18 cannon.

¹²Daniel E. Moore, "Bosnia, Tanks, and 'From the Sea'," <u>U.S. Naval</u>
<u>Institute Proceedings</u>, December 1994, pp. 42-45, details a superb example of handheld photo-recce over Bosnia-Herzegovina.

¹³Vincent P. Grimes, "Intelligent Drones Offer Mastery for Warfighters," National Defense, December 1994, pp. 30-31.

Finally, the capability to perform precision CAS in degraded weather remains elusive. A possible solution lies in an emerging family of weapons which are aided by use of the Global Positioning System (GPS). Employment of these weapons would allow attacks on discrete targets without visual acquisition, assuming that GPS coordinates of the target were known. CV aircraft employing these weapons could provide a new, and necessary, capability to the CJTF.

Analysis of Peace Enforcement Capabilities

Charles Dobbie descriptively states that "peacekeeping requires a referee, peace enforcement demands a player." PE operations may involve combat to maintain or restore peace through a discriminate, disciplined application of force. The use of force will typically be as a last resort when all other means of persuasion have failed. Unbridled force could jeopardize attainment of policy goals or result in a situation in which simultaneous PO and substantial combat operations were underway. PE tasks include separation of belligerents, restoration of territorial integrity, or implementations of sanctions.

Discussion

CV air power has offensive capabilities which satisfy the CJTF requirements. Fighter and fighter-attack aircraft patrol airspace to predominate over hostile air forces and are

¹⁴Charles Dobbie, "A Concept for Post-Cold War Peacekeeping," <u>Survival</u>, Autumn 1993, pp. 141-147.

interoperable with NATO, Air Force, and organic airborne early warning assets. The PE operation Deny Flight in Bosnia-Herzegovina has relied extensively on such CV air power since its inception.

The CJTF desire to mete out the minimum violence necessary in PE points again to the use of precision guided weapons. CV attack and fighter-attack are well-versed in their employment and can engage a variety of ground targets, as well as seaborne units. 15

As a self-contained unit, the air wing can bring many assets to bear in suppression of hostile air defenses.

Utilizing the HARM missile, aircraft can selectively engage specific threat emitters to destroy or impair their effectiveness; a selectivity the CJTF could require to prevent further escalation. EA-6B aircraft can provide radar jamming, independently or in conjunction with the HARM attacks.

Proposal

The greatest drawback to using offensive air power in peace operations, from the CV or elsewhere, is the incredible destructive force of the weaponry employed. The employment of even highly precise guided armaments could result in unacceptable collateral damage or civilian casualties in

¹⁵Following the Yugoslav Navy shelling of the city of Dubrovnik, the Western European Union issued a report suggesting that "the warship that fires on a defenseless city from a safe distance out to sea must be put in a situation whereby it knows that it can do so at the cost of being promptly sent to the bottom." In such a PE contingency, carrier air power would be optimum.

populated areas, threatening the legitimacy of the operation and damaging the progress of diplomatic negotiations.

An emerging solution may lie in the employment of non-lethal weapons. The U.S. Army is conducting a Low Collateral Damage Munitions effort to research "disabling technologies" that can dazzle or incapacitate personnel or equipment while minimizing collateral damage. The Department of Defense plans to centrally fund a modest initiative in the FY 1996 budget request. The types of weapons being considered include: chemical agents to degrade materials such as rubber or metal, sticky foams to impair personnel movements, optical munitions to flash-blind troops and optical equipment, and sedatives to put troops to sleep. There is speculation that these technologies will be proven by the year 2000 and could be fielded by 2005.

Until such weapons are fielded, the CJTF must rely on present armaments to deliver the minimum dose of force. A short-term remedy might be the employment of LGBs utilizing inert bomb bodies. Such weapons could render certain structures unusable, temporarily disperse belligerents, and demonstrate the willingness to use force, albeit at a lower level of destruction. Beyond this idea, there is little in the way of less-than-lethal weaponry available to the CJTF today.

¹⁶Mark Tapscott and Kay Atwal, "New Weapons That Win Without Killing on DOD's Horizon," <u>Defense Electronics</u>, February 1993, pp. 42-43.

¹⁷Glenn W. Goodman, Jr., "Upping the Nonlethal Ante," <u>Armed Forces</u> <u>Journal International</u>, July 1994, p. 13.

SUMMARY

Carrier air power's proven warfighting flexibility and wide range of capabilities—rapid response, impressive C4I structures, timely intelligence collection and distribution, responsive airborne surveillance, and precision force protection—have been driving forces behind the CV's repeated deployments in peace operations. Aircraft carriers have been utilized by operational commanders because, across the spectrum of peace operations, CV air power capabilities match well with the principles of OOTW.

An honest appraisal of CV air power in peace operations yields shortcomings in particular mission areas requiring more effective capabilities—PSYOPS, night observation, photo-reconnaissance, degraded weather force protection, and minimum lethality weapons—which can be remedied by emerging technologies and greater inventories of present proven hardware. Solutions proposed in this study require no change in force structure and provide capabilities which multiply CV utility throughout the spectrum of peace operations and beyond.

Given the evolving strategic environment, continued employment of aircraft carriers in peace operations should be expected. By adopting improvements to CV effectiveness in these operations, our Navy can equip a CJTF with a robust force, adaptable to a broad range of tasking, in a single mobile platform ready to respond from the sea.

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